

CTS-2287

REMARKS

The following are applicant's response to issues raised in the order as presented in the Office Action.

Claims 1-21 are pending. Claims 1, 10, 13 and 15 have been amended. Claims 22-24 have been withdrawn in the earlier election. Applicants respectfully request entry of this amendment in order to move the instant application toward allowance or alternatively, to place the application in better form for appeal.

Claim Objections

Claim 10 was objected to because of being dependent on the wrong claim.

Claim 10 has been amended to be dependent on claim 9. Withdrawal of the claim

5 objection is respectfully requested.

BEST AVAILABLE COPY**Rejection under 35 USC 102**

Claims 1, 5, 10, and 11 were rejected under 35 USC 102e in view of Glenn, U.S. patent no. 6,214,644. Glenn discloses a flip chip micro-machine package fabrication method.

Glenn does not teach, disclose or suggest as in amended claim 1, a micro-machined semi-conductor device that is mounted to a substrate and has a solder seal

and a rigid support to hold the micro-machined semi-conductor device in the proper position during reflow of the electrical connections. CTS-2287

Glenn does not have a solder seal. The seal of Glenn is formed by an epoxy that is dispensed and cured around the MEMS device (see column 9, lines 1-10). Further, Glenn does not have a rigid support that is used during solder reflow. The electrically conductive bumps 412 of Glenn are formed from a reflowed solder (see column 8, lines 5-16). There is no disclosure in Glenn of supporting the MEMS device during solder reflow in order to maintain the proper distance between the MEMS device and the substrate. In this manner, the device of Glenn is identical to the problems with the prior art that are described in the second paragraph on page 3 of the present application.

Since each and every element of claim 1 of the present invention is not present in Glenn, withdrawal of the 102 rejection is respectfully requested.

Dependent claims 2-12 depend from independent claim 1 and add additional patentable features and are allowable therewith.

Rejection under 35 USC 103

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Claims 2-4, 9 and 12-21 were rejected under 35 USC 103 over Glenn in view of Hinds, EP patent No. 1057779A2. Hinds discloses a flip chip package for micro-machined semiconductors.

Neither Glenn, nor Hinds teach, disclose or suggest, either alone or in combination, as in amended claim 13, a rigid support that holds the MEMS device the

proper distance away from the substrate during solder reflow such that the MEMS^{CTS-2287} device is prevented from collapsing onto the substrate.

None of the cited references show or suggest a rigid support that is used during solder reflow. The electrically conductive bumps 412 of Glenn are formed from a reflowed solder (see column 8, lines 5-16). There is no disclosure in Glenn of supporting the MEMS device during solder reflow in order to maintain the proper
5 distance between the MEMS device and the substrate. In this manner, the device of Glenn is identical to the problems with the prior art that are described in the second paragraph on page 3 of the present application.

Assuming that the combination of Glenn and Hinds was made, It would still fail to meet the limitations of the present invention as claimed. If the flip chip micro-machine package of Hinds was combined with the solder joints of Hinds, the resulting combination would fail to have a rigid support that is used during solder reflow to prevent the MEMS device from collapsing onto the surface of the substrate.

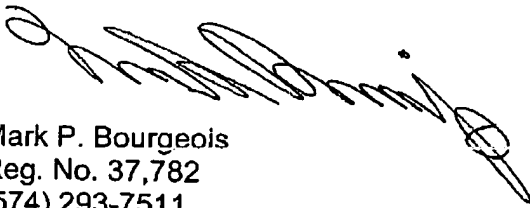
As the court of Appeals for the Federal Circuit has set forth, even if a prior art reference could be modified to construct an applicant's invention, the modification is not obvious unless there is a suggestion in the prior art. *In re Laskowski*, 10 USPQ2d 1397, 1398 (Fed. Cir. 1989). There is no suggestion to modify Glenn in the manner suggested.

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Dependent claims 14-21 depend from independent claim 13 and add additional^{CTS-2287}
patentable features and are allowable therewith.

A notice of allowance is respectfully requested.

Respectfully submitted,



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